

REMARKS

Claims 1, 3, 7, 9, 11-13, 26-30, 39-41 and 44-45 are pending in the application. By this Amendment, claims 1, 3, 9 and 26 are amended and claims 5, 31-32, 34-36 and 42-43 are canceled without prejudice or disclaimer. Various amendments are made for clarity and are unrelated to issues of patentability.

Entry of the amendments is proper under 37 C.F.R. §1.116 because the amendments: (1) place the application in condition for allowance; (2) do not raise any new issues requiring further search and/or consideration; and/or (3) place the application in better form for appeal, should an appeal be necessary. More specifically, independent claims 1 and 26 are amended to include features from dependent claims 5 and 31, respectively. Since this subject matter has already been searched and examined, no new issues are raised. Entry is thus proper under 37 C.F.R. §1.116.

The Office Action rejects claims 1, 3, 5, 7, 9, 26-28, 30-31 and 41 under 35 U.S.C. §102(b) by U.S. Patent Publication 2002/0036466 to Tanaka et al. (hereafter Tanaka). The Office Action also rejects claims 32, 36 and 42 under 35 U.S.C. §103(a) over U.S. Patent 6,514,111 to Ebihara et al. (hereafter Ebihara). Still further, the Office Action rejects claims 11-13, 29, 34-35 and 43-45 under 35 U.S.C. §103(a) over Tanaka and Ebihara. The rejections are respectfully traversed with respect to the pending claims.

Independent claim 1 recites a first substrate, a second substrate, and a sealing layer located between the first substrate and the second substrate, wherein the sealing layer has a thermal expansion coefficient of approximately $65 \times 10^{-7} \sim 80 \times 10^{-7} / ^\circ\text{C}$. Independent claim 1 also recites at least one of a buffer layer or a dielectric layer formed between the first substrate and

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the sealing layer, wherein the at least one of the buffer layer or the dielectric layer has the following composition: PbO at a ratio of 45% to 55%, B₂O₃ at a ratio of 10% to 20% and SiO₂ at a ratio of 15%-25%, and wherein the at least one of the buffer layer or the dielectric layer has a thermal expansion coefficient different from the thermal expansion coefficient of the sealing layer.

The applied references do not teach or suggest at least these features of independent claim 1. More specifically, Tanaka does not teach or suggest that the at least one of the buffer layer or the dielectric layer has a thermal expansion coefficient different from the thermal expansion coefficient of the sealing layer. More specifically, the Office Action (on pages 3 and 10) appears to state that Tanaka's partition wall 23 corresponds to the claimed sealing layer. However, as would be well known to one skilled in the art, the partition wall corresponds to a barrier rib. Tanaka's partition walls are not sealing layers. FIG. 1 of the present application clearly shows barrier ribs 8, which may correspond to partition walls, such as the walls 23 shown in Tanaka. It is well known to one skilled in the art that partition walls/barrier ribs do not correspond to a sealing layer.

Further, Tanaka's partition wall 23 does not teach or suggest that at least one of the buffer layer or the dielectric layer has a thermal expansion coefficient different than the thermal expansion coefficient of the sealing layer. That is, the Office Action appears to state that the dielectric layer and the partition wall are made of a same material and therefore the partition wall has the same thermal expansion coefficient as the dielectric layer. See, for example, the Office Action on page 10. In view of this allegation/interpretation, the Office Action states that the

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thermal expansion coefficient for Tanaka's dielectric layer does not teach or suggest that a thermal expansion coefficient is different for the claimed sealing layer and at least one buffer layer and the dielectric layer.

Applicant also respectfully notes that the difference of the thermal expansion coefficients between the dielectric layer, substrate and sealing layer are discussed in the present specification. That is, the specification clearly describes in at least one non-limiting embodiment that the upper dielectric layer has a thermal expansion coefficient greater than the thermal expansion coefficient of the sealing layer. See, for example, paragraphs [0062]-[0063] of the present application.

In view of the above, Tanaka does not teach or suggest the claimed sealing layer. Additionally, Tanaka does not teach or suggest the claimed at least one of the buffer layer or the dielectric layer having a thermal expansion coefficient different than the thermal expansion coefficient of the sealing layer. For at least these reasons, Tanaka does not teach or suggest all the features of independent claim 1. Ebihara does not teach or suggest the missing features. Thus, independent claim 1 defines patentable subject matter.

Independent claim 26 recites a first substrate, a second substrate, and a sealing layer between the first substrate and the second substrate, wherein the sealing layer has a thermal expansion coefficient of approximately $65 \times 10^{-7} \sim 80 \times 10^{-7} / ^\circ\text{C}$. Independent claim 26 also recites at least one of a buffer layer or a dielectric layer formed between the first substrate and the sealing layer, wherein the at least one of the buffer layer or the dielectric layer has a thermal expansion coefficient of approximately $72 \times 10^{-7} / ^\circ\text{C}$ to $85 \times 10^{-7} / ^\circ\text{C}$, and wherein the thermal expansion

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coefficient of the at least one of the buffer layer or the dielectric layer is different from the thermal expansion coefficient of the sealing layer.

For at least similar reasons as set forth above, the applied references do not teach or suggest the features of independent claim 26. More specifically, Tanaka and Ebihara do not teach or suggest the claimed sealing layer as recited in independent claim 26. That is, Tanaka's partition wall does not correspond to the claimed sealing layer. Further, Tanaka does not teach or suggest that the thermal expansion coefficient of the at least one of the buffer layer or the dielectric layer is different from the thermal expansion coefficient of the sealing layer. Ebihara does not teach or suggest these missing features. Thus, independent claim 26 defines patentable subject matter.

Accordingly, each of independent claims 1 and 26 defines patentable subject matter. Each of the dependent claims depends from one of the independent claims and therefore defines patentable subject matter at least for this reason. In addition, the dependent claims recite features that further and independently distinguish over the applied references.

CONCLUSION

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 3, 7, 9, 11-13, 26-30, 39-41 and 44-45 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

Serial No. **10/830,068**

Docket No. **YHK-0135**

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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Date: August 4, 2008

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